August 9, 2017

Mr. Mark McLoughlin
California High Speed Rail Authority
770 L Street, Su. 800
Sacramento, CA 95814

Dear Mr. McLoughlin:

RE: AMENDED CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER FOR THE CALIFORNIA HIGH SPEED TRAIN SYSTEM, FRESNO TO BAKERSFIELD SECTION (FILE NUMBER SB16006IN)

Enclosed please find an amended CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER, authorized by the State Water Resources Control Board Acting Executive Director, Michael Lauffer. This Order is issued to the California High Speed Rail Authority (Applicant) for the California High Speed Train System, Fresno to Bakersfield section Permitting Phase 1b (Project). Attachments A through G of the Enclosure are also part of the Order.

This Order is issued in response to an application submitted by Applicant for proposed Project discharges to waters of the state, to ensure that the water quality standards for all waters of the state impacted by the Project are met. You may proceed with your Project according to the terms and conditions of the enclosed Order.

If you require further assistance, please contact me by phone at (916) 558-1709 or by email at clifford.harvey@waterboards.ca.gov. You may also contact Bill Orme, Chief of the Water Quality Certification and Wetlands Unit, by phone at (916) 341-5464 or by email at Bill.Orme@waterboards.ca.gov.

Sincerely,

Mark Chin
Environmental Scientist
Division of Water Quality – Water Quality Certification and Wetlands Unit
State Water Resources Control Board

Enclosures (1): Order for California High Speed Train System, Fresno to Bakersfield section.
cc: see next page

(Delivered via email if email address is listed.)

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AMENDED CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Reg. Meas. ID:	395528
Place ID:	805103
SWRCB ID:	SB 16006-IN
USACE#:	SPK-2009-01482

Effective Date: August 9, 2017

Program Type: Fill/Excavation

Project Type: Railroads

Project: California High Speed Train System, Fresno to Bakersfield (Project)

Applicant: California High Speed Rail Authority

Applicant Contact:
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State Water Board Contact Person:
If you have any questions, please call State Water Resources Control Board (State Water Board) Staff listed above or (916) 341-5569 and ask to speak with the Water Quality Certification and Wetlands Unit Program Manager.

Table of Contents

I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is **amended and** issued at the request of the California High Speed Rail Authority (herein after Permittee) for the Project. This Order is for the purpose described in application and supplemental information submitted by the Permittee. The **first** application was received on March 21, 2014. The application was determined complete on July 7, 2016. Prior to receiving a complete application, State Water Board staff issued a notice of incomplete application and the Permittee responded to the request for application information on the following dates (Table 1).

Amendment: This amendment authorizes construction to proceed on the segment of the Project referred to as PP 1.b, previously excluded from the Order. Changes to the certification and attachments include: (1) describing the additional impacts to waters that are expected to result from construction of PP 1.b; (2) describing the compensatory mitigation to be provided for temporary and permanent impacts to waters; (3) Maps showing the location of waters impacts for PP 1.b No other changes are authorized or intended by this amendment. All changes due to this amendment to the Clean Water Act Section 401 Water Quality Certification issued on January 27, 2017 are shown below as additions in bold underline, and deletions in ~~bold strikethrough.~~

Table 1: Record of Notice(s) of Incomplete Application	
Date(s) of Notice of Incomplete Application	Date all requested information was received.
3/27/2014. 7/2/2014, 4/28/2015	7/7/2016

State Water Board staff requested additional information necessary to supplement the contents of the complete application and the Permittee responded to the request for supplemental information on the following dates (Table 2).

Table 2: Record of Supplemental Application Information	
Date of Request for Supplemental Information	Date all requested information was received.
7/3/2015	11/17/2016

Additionally, State Water Board Staff issued a Denial Without Prejudice on July 3, 2015.

II. Public Notice

The State Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from September 23, 2016 to October 14, 2016. The State Water Board did not receive any comments during the comment period.

III. Project Purpose

The purpose of the Project is to construct, operate, and maintain the Fresno to Bakersfield (F-B) Section of the California High Speed Train (HST) system to provide the public with electric powered high-speed rail service that provides predictable and consistent travel times between major urban centers and connectivity to airports, mass transit systems, and the highway network in the South San Joaquin Valley, and to connect the northern and southern portions of the proposed system.

IV. Project Description

The Project will construct approximately ~~94~~**87** miles of the overall HST project. The Project will be completed in phases. This **amended** Order permits construction of Permitting Package (PP) 1.a, to ~~initially~~ construct 29.3 miles of the F-B section and PP 1.b ~~Future F-B PPs,~~ to complete the balance of the ~~94~~**87**-mile F-B section~~. are expected to be proposed by the Permittee. Future PPs would be addressed through Certification amendments.~~

When completed, the Project – in conjunction with other project HST sections - would provide new steel wheel on steel rail high speed passenger rail service to more than 90 percent of the state's population. At final build-out, the system would connect and serve the major metropolitan areas of California, extending from San Francisco and Sacramento in the north to San Diego in the south.

The Project includes the HST tracks, structures, stations, traction power substations, maintenance facilities, and train vehicles. The HST will use four different track types. These track types have varying profiles: low, near-the-ground tracks are at grade, higher tracks can be elevated by either a structure or on a retained fill platform, and below-grade tracks are in a retained cut. The type of bridges that might be built includes full channel spans, large box culverts, or, for some larger river crossings, piers within the ordinary high-water channel. The track structure will consist of either a direct fixation system (with track, rail fasteners, and slab), or ballasted track, depending on local conditions.

V. Project Location

The Project is a linear transportation project traversing four counties, Fresno, Kings, Tulare and Kern (See Map 1). The Project extends from East American Avenue in Fresno County to the point where the right-of-way for the HST crosses Poplar Avenue, north of West Tulare Avenue, between the communities of Shafter and Wasco. ~~A map showing the Project location is in Attachment B of this Order on Map 1.a. As described above, this Order authorizes PP1.a only.~~ **The overall project area for the Fresno-Bakersfield section is shown in Map 1.a of Attachment B. The project area for PP1.a is shown in map 1.b. This amended order authorizes work for PP 1.a and 1.b as shown in Maps 1.c and 1.d and as described in Tables 3 and 4 below.**

The PP 1.a section of the Project is as shown in Map 1.b and as described in Table 3 below.

The PP 1.b section of the Project is as shown in Maps 1.c, d, and e as described in Table 4 below.

Table 3: Location Details for California High Speed Train – Fresno to Bakersfield Certification -- Permitting Package (PP) 1.a				
Beginning and end points	Description	Latitude	Longitude	Miles
PP 1.a				
1.a - North, north end (Point A)[1]	Beginning 1,000 ft. south of E American Ave	36° 39' 48.6468"N[2]	119° 45' 2.6136"W	14.5
1.a- North, south end (Point B)	Davis Ave, approx. 1,000 ft. east of S. Fowler Ave	36° 28' 28.3872"N	119° 40' 12.954"W	
PP1.a - South, north end (Point C)	1,000 ft. north of Dover Ave	36° 25' 7.5246"N	119° 36' 3.3834"W	14.8
1.a – South, South End (Point D)	1,000 ft. south of Kansas Ave	36° 12' 26.2728"N	119° 36' 41.4036"W	
			PP 1(a) Total Miles	29.3
Notes: 1. Points are Illustrated in Attachment B, Maps 1b. **and 1.c** 2. North Latitude and West Longitude in degrees, minutes and seconds.				

Table 4: Location Details for California High Speed Train – Fresno to Bakersfield Certification -- Permitting Package (PP) 1.b				
Beginning and end points	**Description**	**Latitude**	**Longitude**	**Miles**
PP 1.b				
1.b- North, north end (Point B)	**Davis Ave, approx. 1,000 ft. east of S. Fowler Ave**	**36° 28' 28.3872"N**	**119° 40' 12.954"W**	**5.6**
PP1.b - North, south end (Point C)	**1,000 ft. north of Dover Ave**	**36° 25' 7.5246"N**	**119° 36' 3.3834"W**	
1.b – South, north End (Point D)	**1,000 ft. south of Kansas Ave**	**36° 12' 26.2728"N**	**119° 36' 41.4036"W**	**52**
1.b – South, south End (Poplar Ave)	**Poplar Ave**	**35° 31' 17.9214"N**	**119° 17' 44.9082"W**	
			PP 1(b) Total Miles	**57.6**
Notes: 1. Points are Illustrated in Attachment B, Map 1b. 2. North Latitude and West Longitude in degrees, minutes and seconds.				

VI. Project Impact and Receiving Waters Information

The Project is located within the jurisdiction of the Central Valley Regional Water Quality Control Board (Regional Water Board). Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the applicable water quality control plans (Basin Plan) for the region and other plans and policies which may be accessed online at: http://www.waterboards.ca.gov/plans_policies/. The Basin Plan includes water quality standards, which consist of existing and potential beneficial uses of waters of the state, water quality objectives to protect those uses, and the state and federal antidegradation policies. Project impact and receiving waters information for PP 1.a **and 1.b** can be found in Attachment C, **which has been revised to include PP1.b impacts**. Table 1 of Attachment C shows the receiving waters and beneficial uses of waters of the state impacted by the Project. Individual impact location and quantity are also shown in Table 1 **of Attachment C.**

VII. Description of Direct Impacts to Waters of the State

Temporary Project impacts will result from pre-construction and construction activities that will place temporary fill in waters. These activities include construction of temporary access roads and staging areas.

Permanent Project impacts for PP 1.a are the result of permanent removal or modification of **streams, wetlands (including vernal pools),** detention basins, irrigation ditches and canals. Detention basins are categorized as "lakes". Irrigation ditches and canals are categorized as "stream channels". Project fill/excavation quantities for all PP 1.a **and PP1.b** impacts are summarized in Table 5.

Table 5: Total Project Fill/Excavation Quantity – Permitting Package (PP) 1.a and 1.b.

Aquatic Resource Type	Temporary Impact[1]			Permanent Impact					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	CY[2]	LF	Acres	CY	LF	Acres	CY	LF
Lake*	**11.400**			~~1.670~~ **35.420**		**			
Stream Channel (anthropogenic) ***	~~1.62~~ **9.340**		~~3900~~ **14,070**	~~11.160~~ **53.230**		~~29,683~~ **96,286**			
Stream Channel (natural)****	**0.490**		**97**	**2.190**		**2,605**			
Stream Channel Total	**9.830**		**14,167**	**55.420**		**98,891**			
Wetland	**1.090**			**1.570**					
Vernal Pool				**1.340**					

1. Includes only temporary direct impacts to waters of the state and does not include upland areas of temporary disturbance which could result in a discharge to waters of the state. Temporary impacts, by definition, are restored to pre-project conditions and therefore do not include a physical loss of area or degradation of ecological condition.

2. Cubic Yards (CY); Linear Feet (LF)

*Lake impacts are to constructed detention basins used for irrigation tailwater collection/redistribution, with no substantial watershed connection.
**Linear feet (cumulative linear feet of multiple sites) not reported.
***PP 1.a **and PP1.b** stream impacts include impacts to constructed canals and ditches, most of which do not directly connect to natural watercourses; no natural watercourses are impacted by PP1.a.
****__An estimated 0.01 acre of emergent wetland is located within and adjacent to seasonal riverine and has been included with seasonal riverine.__

VIII. Description of Indirect Impacts to Waters of the State

The State Water Board recognizes the potential for indirect impacts to waters of the state associated with the Project. Indirect impacts are reasonably foreseeable changes in the environment caused by the Project and its direct impacts, but that are later in time or further removed in distance from the project and its direct impacts. For PP 1.a **and PP1.b** of the Project, no indirect impacts are assessed.

IX. Avoidance and Minimization

The Project, through location and design, is the least environmentally damaging practicable alternative of those considered in the Project EIR/EIS (See section XI). Additional project avoidance and minimization measures include construction BMPs to avoid and control leaks, spills and discharges to water, erosion and sediment control measures, and restoration measures for temporary impacts (further described in section XIVH(1)). These measures are presented in the Project Mitigation Monitoring and Reporting Program (MMRP), dated May, 2014, and further discussed in the CEQA findings, Attachment A.

X. Compensatory Mitigation

The Permittee has agreed to provide compensatory mitigation for direct impacts as described in section XIV (H~~I~~) for permanent impacts.

XI. California Environmental Quality Act (CEQA)

On May 7, 2014, the California High Speed Rail Authority , as lead agency, certified an environmental impact report/environmental impact statement (EIR/EIS) (State Clearinghouse (SCH) No. 2009091126) for the Project and filed a Notice of Determination (NOD) at the SCH on May 8, 2014. Pursuant to CEQA, the State Water Board has made Findings of Facts (Findings) which support the issuance of this Order and are included in Attachment A.

XII. Petitions for Reconsideration

Any person aggrieved by this action may petition the State Water Board to reconsider this Order in accordance with California Code of Regulations, title 23, section 3867. A petition for reconsideration must be submitted in writing and received within 30 calendar days of the issuance of this Order.

XIII. Fees Received

An application fee of $1,097.00 was received on March 21, 2014. The fee amount was determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3), and was calculated as category A - Fill & Excavation Discharges with the dredge and fill fee calculator. An additional fee of $73,794.00 was received on April 28, 2015. **This fee applies to PP 1.a and PP 1.b.**

XIV. Conditions

The State Water Board has independently reviewed the record of the Project to analyze impacts to water quality and designated beneficial uses within the watersheds of the Project. In accordance with this Order, the Permittee may proceed with the Project under the following terms and conditions:

A. Authorization

Impacts to waters of the state shall not exceed quantities shown in Table 4, Section VII.

B. Reporting and Notification Requirements

The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment D, including specifications for photo and map documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment D, which must be signed by the Permittee or an authorized representative.

1. Project Reporting

Annual Reporting: The Permittee shall submit an Annual Report each year on January 31. Annual reporting shall continue until a Notice of Project Complete Letter is issued to the Permittee. Annual reports shall include information detailed in attachment D, Part A "Reporting". The Annual Report will also include all required mitigation monitoring and reporting elements outlined in sections XIVH(1) and I(1).

2. Project Status Notifications

a. **Commencement of Construction:** The Permittee shall submit a Commencement of Construction Report at least seven (7) days prior to start of initial ground disturbance activities.

b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the State Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, State Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period and associated annual fees.

c. **Request for Notice of Project Complete Letter:** The Permittee shall submit a Request for Notice of Project Complete Letter when construction and/or any post-construction monitoring is complete,[1] and no further Project activities will occur. This request shall be submitted to State Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the State Water Board staff shall issue a Notice of Project Complete Letter to the Permittee which will end the post discharge monitoring period and associated annual fees.

3. **Conditional Notifications and Reports:** The following notifications and reports are required as appropriate.

a. **Accidental Discharges of Hazardous Materials**[2]

Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Wat. Code, § 13271):

i. As soon as (A) Permittee has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then:
- first call – 911 (to notify local response agency)
- then call – Office of Emergency Services (OES) State Warning Center at: (800) 852 - 7550 or (916) 845 – 8911
- Lastly follow the required OES procedures as set forth in: http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf

[1] Completion of post-construction monitoring requirements shall be determined by State Water Board staff and shall be contingent on successful attainment of restoration and mitigation performance criteria. Definitions of reporting terms (e.g., Notice of Completion of Discharges, Notice of Complete) are provided in Attachment E).

[2] "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (Health & Saf. Code, § 25501.)

ii. Following notification to OES, the Permittee shall notify State Water Board, as soon as practicable (ideally within 24 hours). Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.

iii. Within five (5) working days of notification to the State Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report.

b. **Violation of Compliance with Water Quality Standards:** The Permittee shall notify the State Water Board of any event causing a violation of compliance with water quality standards. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.

i. ~~Examples of noncompliance events include: lack of storm water treatment following a rain event, discharges causing a visible plume in a water of the state, and water contact with uncured concrete.~~ **Examples of noncompliance events include: discharges to waters of the state due to failure to install or maintain adequate storm water BMPs, hazardous material spills due to negligence, and unpermitted operations in waters of the state.**

ii. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.

c. **In-Water Work:**

i. The Permittee shall notify the State Water Board at least forty-eight (48) hours prior to initiating work in water or stream diversions. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.

ii. Within three (3) working days following completion of work in water or stream diversions, an In-Water Work/Diversions Water Quality Monitoring Report must be submitted to State Water Board staff.

d. **Modifications to Project:** Project modifications may require an amendment of this Order. The Permittee shall give advance notice to State Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The Permittee shall inform State Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order. Notification may be made in accordance with conditions in the certification deviation section of this Order.

e. **Transfer of Property Ownership:** This Order is not transferable in its entirety or in part to any person or organization except after notice to the State Water Board in accordance with the following terms:

i. The Permittee must notify the State Water Board of any change in ownership or interest in ownership of the Project area by submitting a Transfer of Property Ownership Report. The Permittee and purchaser must sign and date the notification and provide such notification to the State Water Board at least 10 days prior to the transfer of ownership. The purchaser must also submit a written request to the State Water Board to be named as the permittee in a revised order.

ii. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.

f. **Transfer of Long-Term BMP Maintenance:** If maintenance responsibility for post-construction BMPs is legally transferred, the Permittee must submit to the State Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The Permittee must provide such notification to the State Water Board with a Transfer of Long-Term BMP Maintenance Report at least 10 days prior to the transfer of BMP maintenance responsibility.

C. Water Quality Monitoring

1. **General:** If surface water is present, continuous visual surface water monitoring shall be conducted **during active construction (i.e., any time construction activity is occurring in or adjacent to surface waters when flowing, ponded or pooled water is present)** to detect accidental discharge of construction related pollutants (e.g. oil and grease, turbidity plume, or uncured concrete). **Site monitors and construction personnel shall be vigilant in observing the water surface, so that if any contaminant plume, sheen, etc. occurs, it will be seen and acted upon in a timely manner.**

2. **Accidental Discharges/Noncompliance:** Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, State Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.

3. **In-Water Work or Diversions:** For Project activities involving planned work in water or stream diversions **in delineated waters of the state** where flowing or standing water is present, or where flowing or standing water may occur during the Project activities; a water quality monitoring plan shall be submitted to State Water Board staff for acceptance at least 30 days in advance of any discharge to the affected water body. Water quality monitoring shall be conducted in accordance with the approved plan.

4. ~~**Post-Construction**~~ **Inspections after Completion of Structure Installation at Individual Sites:** Visually inspect the Project site ~~during the rainy season~~ following completion of ~~all~~ construction activities **in the immediate proximity of any waters of the state** for **three** years to ensure that erosion, stream instability, or other discharge of pollution is not occurring in or downstream of the Project site **as a result of the Project**. Annual reporting for this requirement shall be provided as part of the Post-Construction Compliance Reports, as described in Project mitigation measure BIO MM**#15 until revegetation success criteria described in the plan to be approved under mitigation measure BIO MM #6 are met, and as described in condition H.1 below.** If a discharge is occurring, the applicant shall immediately commence remedial actions, and shall contact the designated State Water Board staff contact within three working days. The State Water Board may require the submission of a Violation of Compliance with Water Quality Standards Report. Additional permits may be required to carry out any necessary site remediation.

D. Standard

1. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, title 23, chapter 28, Article 6 commencing with section 3867. Additionally, the State Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to the Permittee, if the State Water Board determines that: the Project fails to comply with any of the conditions of this Order; or, when necessary to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C. § 1313). For purposes of Clean Water Act section 401(d), the condition constitutes a limitation necessary to assure compliance with water quality standards and appropriate requirements of state law.

2. This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to subsection 3855(b) of chapter 28, title 23 of the California Code of Regulations, and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. This Order is conditioned upon total payment of any fee required under title 23 of the California Code of Regulations and owed by the Permittee.

4. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act, section 401(d), the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order.

E. General Compliance

1. Failure to comply with any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The Permittee and/or discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13385.

2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Regional Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.

3. In response to a suspected violation of any condition of this Order, the State Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provide that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements

ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.

4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals

5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.

6. The Permittee shall adhere to all requirements in the California High Speed Train Fresno to Bakersfield MMRP, dated May, 2014 and accessible at: http://www.hsr.ca.gov/docs/brdmeetings/2014/brdmtg_050614_Item5_6_ExB_Mitigation_Monitoring_Reporting_Program.pdf., which is incorporated herein by reference. The Permittee shall also comply with any additional measures as outlined in Attachment A, CEQA Findings of Fact.

7. **Construction General Permit Requirement:** The Permittee shall maintain compliance with conditions described in, and required by, NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ as amended; NPDES No. CAS000002).

F. Administrative

1. Signatory requirements for all document submittals required by this Order are presented in Attachment E of this Order.

2. This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). If a "take" will result from any act authorized under this Order held by the Permittee, the Permittee must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Permittee is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.

3. The Permittee shall grant State Water Board staff, Regional Water Board staff, or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to:

   a. Enter upon the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.

   b. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order.

c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.

d. Sample or monitor for the purposes of assuring Order compliance.

4. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.

5. A copy of this Order must be available at the Project site(s) during construction for review by site personnel and agencies. All personnel performing work on the Project shall be familiar with the content of this Order and its posted location at the Project site.

6. A Water Quality Monitor shall be employed during construction and shall report to the Contractor's Mitigation Manager as designated in the MMRP. The Water Quality Monitor shall be on site during all ground-disturbing activities that have the potential to affect water quality. The Water Quality Monitor must be notified by the contractor 24 hours prior to the implementation of all MM's pertaining to hydrology, water quality, erosion control, and storm water management. The Water Quality Monitor shall report on compliance of these Project MMs and related conditions of this Certification. The designated Water Quality Monitor shall be qualified and knowledgeable in water quality, erosion and sediment control regulations, practices and principles. The Water Quality Monitor must, at minimum, be a Qualified Storm Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) or a Qualified SWPPP Developer (QSD) as defined in the State Water Board Order 2009-0009-DWQ, effective July 1, 2010, as amended by Orders 2010-0014-DWQ and 2012-0006-DWQ [NPDES No. CAS000002] (collectively, Construction General Permit).

7. Project MMs pertaining to biological resources shall be monitored by a Project Biological Monitor. The Project Biological Monitor must be notified 24 hours prior to the implementation of a biological MM by the contractor. The reports of the status of biological MM must be reported directly to the Project Biological Monitor by the contractor.

8. The Biological Resources Management Plan (BRMP), as required by (MM) Bio-MM#5, must include all biological resources mitigation measures that are described in the EIR/EIS. The BRMP includes measures to protect water quality and beneficial uses of waters of the state; therefore, the conditions of the BRMP that address water quality and beneficial uses must be approved by State Water Board prior to the start of construction.

9. All Project personnel must receive Worker Environmental Awareness Program (WEAP) training before starting work in the Project area, as described in mitigation measure Bio-MM#3. The WEAP shall include training in appropriate water quality protection measures, including compliance with pertinent conditions of this Certification.

10. Lake and Streambed Alteration Agreement – The Permittee shall submit a signed copy of the Department of Fish and Wildlife's lake and streambed alteration agreement to the State Water Board immediately upon execution and prior to any discharge to waters of the state.

G. Construction Conditions

Good Site Management – "Housekeeping"

1. All materials and supplies necessary for implementing these construction conditions must be on-site and ready for use at the start of construction activity, and must remain in supply and ready for implementation throughout the construction process. All non-structural BMP materials (e.g., training documents, compliance tracking procedures) must be ready for use at the start of construction.

2. Construction material, debris, spoils, soil, silt, sawdust, rubbish, steel, welding slag, welding rods, other organic or earthen material, or any other substances which could be detrimental to water quality or hazardous to aquatic life that is discharged as a result of project related activities shall be prevented from entering waters of the state.

3. Waste containers shall be available and regularly serviced at all active construction sites. No rubbish, waste material or waste containers shall be placed and maintained in a manner that could accidentally spill or discharge the contents into waters of the state.

4. The limits of Project disturbance identified in the Project construction plans must be clearly identified in the field with highly visible markers such as construction fencing or silt barriers prior to start of construction activities within waters of the state. Such identification must be properly maintained until construction is completed and the soils have been stabilized. Equipment, materials, or any other substances or activities that may impact waters of the state outside of the limits of Project disturbance are prohibited.

5. Environmentally sensitive areas and environmentally restricted areas must be delineated for exclusion prior to start of construction, as required by mitigation measure Bio-MM#7.

In-Water Work Conditions

6. The term "work in water" means any ground disturbing activities in any delineated waters of the state, including waters of the U.S., that are permitted under this certification, regardless of the presence or absence of flowing or standing water. Work in water commences at the onset of the regulated activity and continues until the activity is finished and all restoration of the affected work area is complete. In-water work activities must not cause water quality objectives of the receiving waters to be exceeded.

7. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to waters of the state.

8. Disturbed in-water work areas must be temporarily stabilized to prevent erosion at least 48 hours prior to the predicted commencement of a rainfall event with greater than a 50 percent probability of occurrence, as predicted by the National Oceanic and Atmospheric Administration (NOAA) - National Weather Service. If the predicted commencement of such a rainfall event is less than 48 hours after the prediction is issued, temporary stabilization of the disturbed in-water work areas must begin immediately.

9. Except for the following conditions, equipment must not be operated in standing or flowing waters without site-specific approval from State Water Board staff:

a. All construction activities must be effectively isolated from water flows to the greatest extent possible. This may be accomplished by working in the dry season or dewatering the work area in the wet season. When work in standing or flowing water is required, structures for isolating the in-water work area and/or diverting the water flow must not be removed until all disturbed areas are cleaned and stabilized. The diverted water flow must not be contaminated by construction activities. All open flow temporary diversion channels must be lined with filter fabric or other appropriate liner material to prevent erosion. Structures used to isolate the in-water work area and/or diverting the water flow (e.g., coffer dam, geotextile silt curtain) must not be removed until all disturbed areas are stabilized, **whether that removal is for seasonal work cessation or for permanent removal at the end of the project.**

b. Coffer dams and water barrier construction must be adequate to prevent seepage into or from the work area to the greatest extent feasible.

c. Flow diversions must be conducted in a manner that prevents pollution and/or siltation and in a manner that restores pre-Project flows (except for variation in flows due to seasonality, upstream diversions, etc.) upon completion of the activity. Diverted flows must be of sufficient quality and quantity, and of appropriate temperature, to support existing fish and other aquatic life both above and below the diversion. Diversions must be designed, installed, and maintained to reduce erosion. Pre-Project flows must be restored to the affected surface water body upon completion of work at that location.

10. If groundwater dewatering is required for the Project, the Applicant shall consult with the Regional Water Board to determine if additional permits are required. If additional Regional Water Board permits relating to dewatering are required, the designated State Water Board staff contact identified in this Certification must be notified and copied on pertinent correspondence pertaining to those other required permits.

11. All temporary dewatering methods shall be designed to have the minimum necessary impacts to waters of the state. All dewatering methods shall be installed such that natural flow is maintained upstream and downstream of the diversion area. Any temporary dams or diversions shall be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the diversion area. All dewatering methods shall be removed immediately upon completion of activities for which diversions are needed.

12. All temporary dewatering activities are subject to the work-in-water reporting and monitoring conditions presented in sections XIV.B.3.c and XIV.C.3 above.

Directional Drilling

13. Because Horizontal Directional Drilling (HDD) and similar drilling operations may affect water quality, the following conditions shall apply to all drilling operations under waters of the state:

a. The discharge of bentonite, drilling muds, lubricants or any drilling compounds into waters of the state is prohibited. A draft HDD or drilling plan shall be prepared, and shall be subject to review by State Water Board staff at least 30 days before drilling activities under waters of the state. No HDD or other drilling operations under waters

of the state shall commence until the HDD plan is approved by State Water Board staff.

b. Release of bentonite, drilling muds, lubricants or any drilling compounds through fractures in the streambed or bank substrate during drilling is referred to as a "frack-out." Because of the potential for frack-outs to occur, the HDD or drilling plan shall include a frack-out response plan. The frack-out response plan shall specify all measures to be initiated if frack-outs should occur during HDD operations.

c. For all HDD and other drilling sites, a means of containment (e.g., damming, fluming) or screening capable of capturing all of the potential discharge shall be described in the HDD plan. The downstream end of any such containment structure shall be capable of containing all bentonite or other drilling muds or debris that may be released during boring or drilling. Any drilling mud, spoils, etc. must be completely removed from the streambed prior to removal of the containment structures (e.g., dam, flume, and screen).

d. An environmental monitor (monitor) shall provide monitoring for compliance with the HDD or drilling plan throughout drilling operations under waters of the state.

e. Any HDD or other drilling operation shall be designed and directed in such a way as to minimize the risk of spills and discharges of all types including the frack-out release of drilling lubricants through fractures in the streambed or bank substrates. In substrates where frack-outs are likely to occur, HDD contractors shall employ all reasonable means and methods available to minimize potential for frack-out.

f. All drilling muds or compounds will be contained and properly disposed of after drilling activities are completed.

g. If bore pits are excavated to support drilling operations, spoils shall be stored a minimum of 25 feet from the top of the bank of streams or wetland/riparian boundary. Spoils shall be stored behind a sediment barrier and covered with plastic or otherwise stabilized (i.e., tackifiers, mulch, or detention).

Hazardous Materials

14. The discharge of petroleum products or other excavated materials to waters of the state is prohibited.

15. Project activities shall not cause visible oil, grease, or foam in the work area or downstream.

16. Spill containment supplies shall be on site in all work areas in sufficient quantities to allow immediate remediation of fuel, oil, hydraulic fluid or similar leaks and spills.

17. Appropriate BMPs must be implemented throughout Project activities to prevent and control potential leaks/spills/drainage of potentially hazardous materials such as: petroleum lubricants, fluids and fuels; non-petroleum lubricants, fluids and fuels such as non-petroleum hydraulic fluid; cured and uncured cements; epoxies, paints and other

protective coating materials; cement concrete or asphalt concrete, and washings and cuttings thereof.

18. Discharge of unset cement, concrete, grout, ~~damaged~~ concrete spoils, or water that has contacted uncured concrete or cement, or related washout to surface waters, ground waters, or land is prohibited. If concrete washout is necessary at a site, washout containment to prevent any discharge shall be used. Wastewater may only be disposed by delivery to a sanitary waste water collection system/facility (with authorization from the facility's owner or operator) or a properly-licensed disposal or reuse facility. **Solid residue from dried cement, concrete, grout, or concrete spoils must be properly disposed of by delivery to an approved landfill or return to an aggregate plant for reuse.**

19. A staging area for equipment and vehicle fueling and storage shall be designated at least one-hundred (100) feet away from waters of the state, in a location where fluids or accidental discharges cannot flow into waters of the state.

20. All Project construction vehicles and equipment shall be well maintained and checked daily for fuel, oil, and hydraulic fluid leaks or other problems that could result in any discharge of toxic or polluting materials.

21. A daily log must be maintained during construction to note the presence and absence of waste releases from vehicles and equipment parked or operated within 100 feet of waters of the state. Copies of the daily log must be maintained on-site. Daily visual inspections for waste releases of all vehicles and equipment parked or operating within or within 100 feet of waters of the state must be conducted before the vehicles or equipment are used for conducting work for the day. Any spillage from leaks must be reported in the daily log and contaminated soils must be immediately removed from the Project site and disposed of at an approved area or facility. State Water Board staff may request this information at any time. Any waste releases (i.e., spills, leaks, etc.) of five gallons or greater must be reported to State Water Board staff within 24 hours with an explanation of how the problem was resolved.

22. Stationary equipment (motors, pumps, generator, etc.) and vehicles parked in delineated waters shall be positioned over drip pans or other types of containment. Spill and containment equipment (oil spill booms, sorbent pads, etc.) shall be maintained on site at all locations where such equipment is used or staged.

23. Equipment working in delineated waters, including in areas protected by diversions, shall be removed from the delineated waters for fueling or service including maintenance whenever feasible. When use of stationary equipment that would require refueling or service in delineated waters is planned, BMPs for managing the additional risk posed by that refueling and service shall be developed and presented to State Water Board staff for approval. Such BMPs should include any additional precautions necessary to minimize and contain any potential spills and leaks.

24. If construction-related materials reach surface waters, appropriate spill response procedures must be initiated as soon as the incident is discovered. In addition, the State Water Board staff contact identified in this Certification must be notified via email and telephone within twenty-four (24) hours of the occurrence.

25. Installation and operation of any underground storage tanks must be conducted in compliance with Health and Safety Code, division 20, chapter 6.7 (commencing with section 25280) and California Code of Regulations, title 23, division 3, chapter 16 (commencing with section 2610).

Invasive Species and Soil Borne Pathogens

26. The Applicant is responsible for ensuring that all Project personnel follow proper weed control practices and for ensuring that project personnel are subject to those plans' requirements. As specified in Bio-MM#4, a Weed Control Plan(s) must be prepared and implemented for the entire Project, including the off-site compensatory mitigation sites. In addition to the plan elements specified in the MMs and the MMRP, the Weed Control Plan(s) must include measures to: (1) limit movement of weed propagules by vehicular traffic through route restrictions; (2) use cleaning stations; and, (3) provide training of Project personnel in prevention of weed dispersal. The Weed Control Plan(s), and any subsequent revisions, must be approved by State Water Board staff prior to implementation and prior to the start of construction.

27. Any straw, hay or other unprocessed plant material used for any purpose must be certified or documented as being weed free.

28. Soil borne pathogens are any nematodes, or any bacterial, protozoan, viral or fungal pathogens that can cause disease or death to native plants, agricultural crops or ornamental plants (e.g., *Phytophthora ramorum*, the cause of sudden oak death syndrome, and *Phytophthora lateralis,* the cause of Port Orford cedar root disease). Any equipment entering or leaving the project area from an area of known soil borne pathogen infestation shall be thoroughly cleaned using methods appropriate for the known pathogen before entering or leaving the project area. The fungus that causes Valley Fever, *Coccidioides* spp., is not considered as a soil borne pathogen in this certification.

Roads and Bridges

29. The number of access routes, number and size of staging areas, and the total area of the activity must be limited to the minimum necessary to achieve the project goal. Routes and work area boundaries must be clearly demarcated.

30. Bridges, culverts, dip crossings, or other structures must be installed so that water and in-stream sediment flow is not impeded. Appropriate design criteria, practices and materials must be used in areas where access roads intersect waters of the state.

31. Temporary materials placed in any water of the state must be removed as soon as construction is completed at that location, and all temporary roads must be removed or re-contoured and restored according to approved re-vegetation and restoration plans.

32. Any structure, including but not limited to, culverts, pipes, piers, and coffer dams, placed within a stream where fish (as defined in Fish and Game Code section 45) exist or may exist, must be designed, constructed, and maintained such that it does not constitute a barrier to upstream or downstream movement of aquatic life, or cause an avoidance reaction by fish due to impedance of their upstream or downstream movement. This includes, but is not limited to, maintaining the supply of water and maintaining flows at an

appropriate depth, temperature, and velocity to facilitate upstream and downstream fish migration. If any structure results in a long-term reduction in fish movement, the Applicant shall be responsible for restoration of conditions as necessary (as determined by the State Water Board and Regional Water Board) to secure passage of fish across the structure.

33. Stream-crossing structures must be designed and constructed to safely convey the flow from the 100-year, 24-hour storm event (including associated bed load and debris movement) and must not result in a change in floodway elevations of more than 12 inches. Stream-crossing structures must be properly aligned within the stream and otherwise engineered, installed, and maintained, to assure resistance to washout, and to prevent erosion and/or aggradation of the stream.

34. A method of containment must be used below any temporary bridge, trestle, boardwalk, and/or other stream crossing structure to prevent any debris or spills from falling into the waters of the state. Containment must be maintained and kept clean for the life of the temporary stream crossing structure.

Fugitive Dust

35. Dust abatement activities can cause discharges of sediment to streams and uplands through application of water or other fluids. Dust abatement chemicals added to water can be hazardous to wildlife and, if allowed to enter streams, detrimental to water quality. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. Dust abatement products or additives that are known to be detrimental to water quality or wildlife shall not be used, unless specific management needs are documented and product-specific application plans are approved by State Water Board staff.

H. Mitigation for Temporary Impacts

1. The Permittee shall restore all areas of temporary impacts to waters of the state and all Project site upland areas of temporary disturbance which could result in a discharge of waters of the state as described in a restoration plan. The restoration plan shall be submitted for written acceptance by State Water Board staff within ninety (90) days of issuance of this Order. The restoration plan shall be prepared in compliance with Project mitigation measure BIO-MM#6, and shall provide the following: a schedule; plans for grading of disturbed areas to pre-project contours; planting palette with plant species native to the Project area; seed collection location; invasive species management; performance standards; and maintenance requirements (e.g. watering, weeding, and replanting). The Permittee shall abide by the following mitigation monitoring requirements: The restoration plan shall also provide measurable performance goals, a plan for **annual** monitoring **and reporting** for achievement of those goals, and adaptive management provisions for circumstances where monitoring shows that restoration goals are not being achieved.

2. The State Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by State Water Board Executive Director that the performance standards provided in the approved restoration plan have not been met or are not likely to be met within the monitoring period.

3. If initial restoration of temporary impacts to waters of the state is not completed within 365 days of the completion of construction at that location, additional mitigation may be required to offset temporal loss of waters of the state. Initial restoration means all actions that are necessary and appropriate to return an area of temporary disturbance to its pre-project condition or better immediately following the end of construction activity. Initial restoration may include revegetation according to the restoration plan, or stabilization of the site until the appropriate season for planting arrives.

Table 6: Required Project Mitigation Quantity for Temporary Impacts for PP 1.a

Aquatic Resource Type	Mit. Type[3]	Units	Method[4]					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	PR	LF			3900[5]			
Stream Channel	PR	Acres			1.62			

Table 7: Required Project Mitigation Quantity for Temporary Impacts for PP 1.b

Aquatic Resource Type	Mit. Type[6]	Units	Method[7]					
			Est.	Re-est.	Reh.	Enh.	Pres.	Un-known
Lake	PR	Acres			11.400			
Anthropogenic Stream Channel	PR	LF			10,171			
Anthropogenic Stream Channel	PR	Acres			7.720			
Natural Stream Channel	PR	LF			97			
Natural Stream Channel	PR	Acres			0.490			
Wetland	PR	Acres			1.090			
Vernal Pool	PR	n/a			0			

[3] PR: Permittee Responsible

[4] Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

[5] For PP 1.a, Rehabilitation of temporary impacts shall be in the form of reconstruction of temporarily affected canals and ditches.

[6] PR: Permittee Responsible

[7] Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

I. Compensatory Mitigation for Permanent Impacts[8]

1. **Final Compensatory Mitigation:** **For PP1.a,** the Permittee shall provide compensatory mitigation for impacts to waters of the state in accordance with the *Draft Permittee Responsible Mitigation Plan for Onsite and Offsite Mitigation for the Fresno to Bakersfield Section of the California High Speed Rail Project Permit Package 1(a)* (Compensatory Mitigation Plan) dated December 1, 2016 and incorporated herein by reference. Compensatory Mitigation for permanent Project impacts shall be provided through establishment of new facilities; i.e., through replacement by relocation of the detention basins, irrigation ditches and canals removed by Project activities. Any deviations from, or revisions to, the Compensatory Mitigation Plan must be pre-approved by State Water Board staff.

   As described in section 5.1 of the **PP 1.a Compensatory Mitigation Plan**, existing storage and conveyance capacity for detention basins, irrigation ditches and canals will be documented with as-built drawings if available, with GPS measurements or aerial photograph interpretation and in coordination with the owner or operator of the facility. Replacement of the detention or conveyance will be coordinated and implemented to meet the operational needs of the facility while preserving functions and values/beneficial uses of the waters affected. This documentation of compliance with PRMP section 5.1 shall be provided to the Water Boards before the onset of construction.

   For PP1.b, the permittee shall provide compensatory mitigation as described in the HST FB *Permittee-Responsible Mitigation Plan for On-Site and Off-Site Mitigation, Permit Package 1b* (PP 1b Mitigation Plans), dated August 2017, and its appendices which include "Mitigation Site Compensatory Mitigation Plans" for four sites: CD Hillman, Cross Creek, Kings River, and Cottonwood Creek. The Kings River and Cottonwood Creek sites shall be acquired in fee title by Westervelt Ecological Services (WES); a conservation easement shall be held by Sequoia Riverlands Trust (SRT) for both parcels. The CD Hillman site shall also be acquired in fee title by WES, who will coordinate with the USFWS to transfer ownership to the Kern National Wildlife Refuge. The Cross Creek East and West sites' habitat development rights shall be purchased by WES; a conservation easement for the habitat development rights shall be held by SRT. Any proposed changes by the applicant in designation of easement holders or arrangement of site protection mechanisms shall be subject to approval by the Water Boards.

   The State Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by State Water Board Executive Director that the performance standards provided in the approved restoration plan have not been met or are not likely to be met within the monitoring period.

2. **Compensatory Mitigation Monitoring Requirements:** **Reporting submittals should be included in the Annual Report as described in Attachment D instructions. For PP1.a, M** monitoring and reporting for replacement or restored features shall be conducted as described in section 5.5 of the **PP1.a** Compensatory Mitigation Plan. The Authority shall provide documentation that the performance standards, including owners'

[8] Compensatory Mitigation is for permanent physical loss and permanent ecological degradation of a water of the state.

approval, provided in section 5.4 and 5.5 of the Compensatory Mitigation Plan are achieved before requesting a Notice of Complete for the Project.

For PP1.b, the permittee shall provide compensatory mitigation for anthropogenic features as described for PP1.a. For impacts to natural watercourses such as natural streams and vernal pools, compensatory mitigation shall be provided by the permittee as described in the approved PP 1b Mitigation Plans. The Authority shall provide documentation that the performance standards, including owners' approval where applicable, are achieved before requesting a Notice of Complete for the Project.

3. **Irrevocable Letter of Credit:**
   a. An irrevocable letter of credit will not be required for PP1.a compensatory mitigation. Financial assurances for PP 1.a compensatory mitigation are waived by this Order. The purpose of financial assurances is to allow the State Water Board to implement a required mitigation project in the event the permittee fails to successfully complete the project in accordance with the applicable performance standards. For PP 1.a, the compensatory mitigation will be completed under the terms and conditions of the Authority's construction contracts for the Project. All detention basins, irrigation ditches and canals will be replaced on-site at a 1:1 ratio. This waiver is based on the following findings:

      i. The Authority has the legal authority to spend an appropriate amount of mitigation funding necessary to successfully complete the mitigation in accordance with the Compensatory Mitigation Plan.

      ii. The Authority has approved the expenditure of that amount of mitigation funding necessary for successfully completing the compensatory mitigation in accordance with the provisions of the Compensatory Mitigation Plan for PP 1a.

   b. **For compensatory mitigation for PP 1b, the State Water Board requires that sufficient financial assurances for mitigation be in place prior to the issuance of a water quality certification to ensure that water quality standards are met (40 C.F.R. § 121.2; Cal. Code Regs., tit. 23, § 3831, subd. (u)).**

      However, in cases where an alternative mechanism is available to ensure a high level of confidence that compensatory mitigation will be provided and maintained, the State Water Board may determine that financial assurances are redundant and therefore not necessary.

      The HSRA is funded, in part, through general obligation bonds authorized by California voters on November 11, 2008. The Legislature adopted a business plan that set aside up to 7.5 percent of these general obligation bond proceeds for, among other things, mitigation of any direct or indirect environmental impacts (Sts. & Hy. Code, § 2704.08, subd. (g)). The HSRA states that its public agency status and the Legislature's intent to expedite funding for the High Speed Rail Project's environmental mitigation serve as a sufficient guarantee on HSRA's performance of compensatory mitigation

requirements. However, HRSA has agreed to provide financial assurances according to the terms in Attachment F Pursuant to these terms in Attachment F, HSRA shall enter into a covenant or obligation to spend the amount of mitigation funding necessary to implement and maintain the mitigation required by the PRMP and this Certification. HRSA shall include a provision that names the State Water Board as a third party beneficiary entitled to act, in its sole discretion, to enforce HSRA's obligations to implement and maintain the required mitigation.

The State Water Board acknowledges that the terms set forth in Attachment F, along with any other financial assurances required by the U.S. Army Corps of Engineers in connection with the HSRA application for a permit, should be sufficient.

4. **Permittee-Responsible Compensatory Mitigation Responsibility:** Permittee responsible compensatory mitigation installation shall be completed within 365 days of authorized impacts, **unless an extension is approved by the State Water Board staff. Any requests for extension shall be provided by the applicant to the State Water Board in writing at least sixty days in advance of the end of the 365 day period. Requests for extension shall provide a clear description of the need for the extension and a proposed new time line for completion. The PP 1.b Compensatory Mitigation Plan must be approved by the State Water Board prior to impacts to waters of the state.**

5. **Total Required Compensatory Mitigation:** **For PP1.a, and 1.b,** the Permittee is required to provide compensatory mitigation for the authorized impacts to **natural streams, and wetlands (including vernal pools); and to anthropogenic** lakes (i.e., detention basins) and stream channels (i.e., irrigation ditches and canals). Compensatory mitigation for **these anthropogenic** permanent project impacts shall be provided through establishment of new facilities; i.e., through replacement by relocation of the detention basins, irrigation ditches and canals. Total required Project compensatory mitigation information for permanent physical loss of area is summarized in ~~Table 6~~ **Tables 8 and 9a-c**.

6. **a. Mitigation quantities reported in tables 8 and 9a-c are minimum quantities necessary for the Project. Mitigation capacity provided at the four sites specified in the PP 1.b Mitigation Plan exceeds the minimum quantities provided for the Project. This excess capacity shall be retained in reserve and may, upon approval by State Water Board staff, be applied to unforeseen new impacts for the Project or to impacts that may arise due to activities under other permitted projects (e.g., changes in footprint due to revised design, additional mitigation due to potential temporal loss between season of impact and season of replacement mitigation, etc.).**

   b. Any remaining excess mitigation capacity not required for PP1.b impacts may, upon approval by State Water Board staff, be applied to other HST-related activities such as the future construction of the Bakersfield – Locally Generated Alternative, the Heavy Maintenance Facility, or the Command Center. Use of any reserve capacity shall be contingent on site-specific consideration of impacts, watershed location, appropriate mitigation ratios, and any other relevant factors.

c. Excess capacity includes:

- **0.59 acres of wetland enhancement, 6.29 acres of wetland re-establishment, 4.22 acres of wetland rehabilitation, and 0.87 acres of stream (riparian) enhancement at the King's River mitigation site**
- **2.39 acres of vernal pool rehabilitation, 6.87 acres of vernal pool enhancement, and 91.8 acres of vernal pool preservation at the Cottonwood Creek mitigation site**
- **172.81 acres of vernal pool preservation at the Cross Creek mitigation site**

Table 8: Required Project Compensatory Mitigation Quantity for Permanent Physical Loss of Area for PP 1.a and PP1.b anthropogenic channels and basins

Aquatic Resource Type	Comp Mit. Type	Units	Method[9]					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Lake	PR	Acres	~~1.670~~ **35.420**					
Stream Channel	PR	Acres	~~11.160~~ **52.230**					
Stream Channel	PR	LF	~~29,683~~ **96,286**					

Table 9a: Required Project Compensatory Mitigation Quantity for Temporal Impacts for PP 1.b natural features

Aquatic Resource Type	Comp Mit. Type	Units	Method[10]					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	PR	Acres			**.049**			
Stream Channel	PR	LF			**97**			

[9] Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

[10] Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

Table 9b: Required Project Compensatory Mitigation Quantity for Permanent Physical Loss of Area and for PP 1.b Natural Channels and Wetlands								
Aquatic Resource Type	Comp Mit. Type	Units	Method[11]					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Stream Channel	PR	Acres		2.390	1.480	5.230		
Wetland	PR	Acres		2.300				
Vernal Pool	PR	Acres	1.320		1.830			

J. Certification Deviation

1. Minor modifications of Project locations or predicted impacts may be necessary as a result of unforeseen field conditions, necessary engineering re-design, construction concerns, or similar reasons. Some of these prospective Project modifications may have impacts on water resources. Some modifications of Project locations or predicted impacts may qualify as Certification Deviations as set forth in Attachment F. For purposes of this Certification, a "Certification Deviation" is a Project locational or impact modification that does not require an immediate amendment of the Order, because the State Water Board has determined that any potential water resource impacts that may result from the change are sufficiently addressed by the Order conditions and the CEQA Findings. After the termination of construction, this Order will be formally amended to reflect all authorized Certification Deviations and any resulting adjustments to the amount of water resource impacts and required compensatory mitigation amounts.

2. A Project modification shall not be granted a Certification Deviation if it warrants or necessitates changes that are not addressed by the Order conditions or the CEQA environmental document such that the Project impacts are not addressed in the Project's environmental document or the conditions of this Order. In this case a supplemental environmental review and different Order will be required.

XV. Water Quality Certification

I hereby issue the Order for the California High Speed Train System, Fresno to Bakersfield Section, State Water Board I.D. no. SB16006-IN, certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

[11] Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

The State Water Board will file a Notice of Determination (NOD) at the SCH within five (5) working days of issuance of this Order. This discharge is also regulated pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ which authorizes this Order to serve as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.).

Except insofar as may be modified by any preceding conditions, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions of this Order and the attachments to this Order; and, (b) compliance with all applicable requirements of Statewide Water Quality Control Plans and Policies, the Regional Water Boards' Water Quality Control Plans and Policies.

8-9-2017

Michael Lauffer
Acting Executive Director
State Water Resources Control Board

Date

Attachment A	CEQA Findings of Fact
Attachment B	Project Area Maps
Attachment C	Project Impacts, Mitigation and Receiving Waters
Attachment D	Reporting and Notification Requirements
Attachment E	Signatory Requirements
Attachment F	Certification Deviations

Print Form

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☐ County Clerk
County of: _____
Address: _____

From:

Public Agency: State Water Res Control Board
Address: 1001 I St, 15th Floor
Sacramento, CA 95814
Contact: Cliff Harvey, Environmental Scientist
Phone: 916-558-1709

Lead Agency (if different from above):
High Speed Rail Authority
Address: 770 L St., Su 800
Sacramento, CA 95814
Contact: Mark McLoughlin
Phone: 916-403-6934

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2009091126

Project Title: California High Speed Train - Fresno to Bakersfield Permitting Packages 1.a and 1.b

Project Applicant: California High Speed Rail Authority

Project Location (include county): 87 mile-long right of way through Fresno, Kings, Tulare, and Kerns Counties

Project Description:
This is an amendment of the original certification. The project will construct approximately 87 miles of the overall HST project. The Project includes the HST tracks, structures, stations, traction power substations, maintenance facilities, and train vehicles. The HST would use four different track types: at grade, elevated by either a structure or on a retained fill platform, and below-grade tracks in a retained cut. The type of bridges that might be built includes full channel spans, large box culverts, or, for some larger river crossings, piers within the ordinary high-water channel.

This is to advise that the State Water Resources Control Board (☐ Lead Agency or ☒ Responsible Agency) has approved the above described project on _____ (date) and has made the following determinations regarding the above described project.

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
http://www.hsr.ca.gov/Programs/Environmental_Planning/final_fresno_bakersfield.html

Signature (Public Agency): _____ Title: Acting Executive Director

Date: 8-9-2017 Date Received for filing at OPR: _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011